

Schroeder et al., Serial No. 09/622,419

AMENDMENTS TO THE CLAIMS

1. (currently amended) A process for producing biotin wherein an S-adenosylmethionine synthase gene, having the sequence SEQ ID No. 1, and at least one further biotin biosynthesis gene bioS1, bioS2 or bioS3, having the sequences SEQ ID No. 3, ~~SEQ ID No. 5 or SEQ ID No. 7, or functional variants, analogues or derivatives thereof having from 80 to 100% homology based on the corresponding amino acid sequence and possessing the corresponding SAM synthase, bioS1, bioS2, or bioS3 enzymic activity,~~ are expressed in a prokaryotic or eukaryotic host organism which is able to synthesize biotin, this organism is cultured and the synthesized biotin is used directly after separating off the biomass or after purifying the biotin.
2. (canceled)
3. (currently amended) A process as claimed in claim 1, wherein an organism selected from the group consisting of the genera Escherichia, Citrobacter, Serratia, Klebsiella, Salmonella, Pseudomonas, Comamonas, Acinetobacter, Azotobacter, Chromobacterium, Bacillus, Clostridium, Arthrobacter, Corynebacterium, Brevibacterium, Lactococcus, Lactobacillus, Streptomyces, Rhizobium, Agrobacterium, Staphylococcus, Rhodotorula, Sporobolomyces, Yarrowia, Schizosaccharomyces ~~or~~ and Saccharomyces is used as the host organism.
4. (previously presented) A process as claimed in claim 1, wherein a regulation-defective biotin mutant is used as the host organism.

5. (currently amended) A process as claimed in claim 1, wherein at least one copy of the genes having the sequences SEQ ID No.1, SEQ ID No. 3, ~~SEQ ID No. 5 and SEQ ID No. 7 as claimed in claim 1~~ is expressed in a prokaryotic or eukaryotic host organism either alone or together with one or more copies of at least one further biotin gene selected from the group bioA, bioB, bioF, bioC, bioD, bioH, bioP, bioW, bioX, bioY or bioR.

6. (currently amended) A process as claimed in claim 1, wherein at least one copy of the genes having the sequences SEQ ID No.1, SEQ ID No. 3, ~~SEQ ID No. 5 and SEQ ID No. 7 as claimed in claim 1~~ is expressed in a prokaryotic or eukaryotic host organism either alone or, on a shared vector or on separate vectors, together with one or more copies at least one further biotin gene selected from the group bioA, bioB, bioF, bioC, bioD, bioH, bioP, bioW, bioX, bioY or bioR.

7-15 (canceled).